

Amendments to the Abstract:

The "Abstract" has been replaced with:

[A holder for a highly flexible tissue-type heart valve is disclosed that maintains an
5 implant shape to the valve. The holder may have cusp and commissure contacting supports, and
may be attached at all six such supports, or only three. The holder may be flexible to permit
inward flexing of the heart valve during implant for greater visibility when implanting using a
running suture method. The holder may be formed of flexible wires such as Nitinol, and shaped
to resist excessive axial and torsional deformation of the valve. A short handle connector
10 suitable for manual grasping may be attached and stored with the valve, with the handle
connector having a coupling for receiving a longer delivery handle. A two stage holder may be
utilized to accommodate different implant methods.] A highly flexible tissue-type heart valve is
disclosed having a structural stent in a generally cylindrical configuration with cusps and
commissures that are permitted to move radially. The stent commissures are constructed so that
15 the cusps are pivotably or flexibly coupled together at the commissures to permit relative
movement therebetween. The stent may be cloth-covered and may be a single element or may be
made in three separate elements for a three cusp valve, each element having a cusp portion and
two commissure portions; adjacent commissure portions for each pair of adjacent stent element
combining to form the stent commissures. If the stent has separate elements their commissure
20 portions may be pivotably or flexible coupled, or may be designed to completely separate into
independent leaflets at bioresorbable couples. The cloth covering may have an outwardly
projecting flap that mates with valve leaflets (e.g., pericardial leaflets) along the cusps and
commissures. A connecting band may be provided that follows the cusps and commissures and
extends outwardly. The valve is connected to the natural tissue along the undulating connecting
25 band using conventional techniques, such as sutures. The connecting band may be a cloth-
covered silicon member and attaches to the underside of the valve at the cusps to provide support
to the stent and to the outer side of the valve at the commissures. The connecting band includes
commissure portions defining generally axial gaps that help permit flexing of the valve.